

1991 Corn Program Worksheet

ESO 1804

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1804

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Prepared by Allan Lines, Extension Economist, OSU

Adapted from Purdue Cooperative Extension Service worksheet

THE OHIO STATE UNIVERSITY

This worksheet can be used to calculate the returns above direct costs on ASCS base acres for five alternatives. These are: (1) Non-participation; (2) Participate in basic 92.5% planting; (3) Substitute soybeans on the 15% corn normal flex (NFA); (4) Substitute soybeans on both 15% NFA plus 10% optional flex acres (OFA); (5) Elect 0/92% program with 15% soybeans.

The following program assumptions are used:

Target price \$2.75/bu.
Loan \$1.62/bu.
Expected deficiency payment \$.58/bu.
Acreage reduction program (ARP) 7.5% of base

Assumes on-farm storage
Assumes \$50,000 limit is not reached
Maximum deficiency payment acres 77.5% of base

Your Input Data

a. ASCS base acres	_____	f. Direct cost of set-aside (\$/a.)	_____
b. ASCS base yield (bu./a.)	_____	g. Expected market price (\$/bu.)	_____
c. Yield-100% planted (bu./a.)	_____	h. Expected deficiency payment (\$/bu.) \$	_____
d. Yield 92.5% planted (bu./a.)	_____	i. Soybean yield (bu./a.)	_____
e. Direct costs of production (\$/a.)	_____	j. Direct costs soybean production (\$/a.)	_____
		k. Expected soybean market price (\$/bu.)	_____

Calculations

	Non-participation	7.5% ARP 15% Flex (Corn) 77.5% Program (Corn)	7.5% ARP 15% Flex (Beans) 77.5% Program (Corn)	7.5% ARP 25% Flex (Beans) 67.5% Program (Corn)	7.5% ARP 15% Flex (Beans) Elect 0/92 (0% Corn) \$§
Value of production	$a \cdot c \cdot g$	$a \cdot d \cdot g \cdot .925$	Corn $a \cdot d \cdot g \cdot .775$ Beans $a \cdot i \cdot k \cdot .15$	Corn $a \cdot d \cdot g \cdot .675$ Beans $a \cdot i \cdot k \cdot .25$	$a \cdot i \cdot k \cdot .15$
+Deficiency payment		$a \cdot b \cdot h \cdot .775$	$a \cdot b \cdot h \cdot .775$	$a \cdot b \cdot h \cdot .675$	$a \cdot b \cdot .58 \cdot .713$
-Direct cost of production	$a \cdot e$	$a \cdot e \cdot .925$	Corn $a \cdot e \cdot .775$ Beans $a \cdot j \cdot .15$	Corn $a \cdot e \cdot .675$ Beans $a \cdot j \cdot .25$	Beans $a \cdot j \cdot .15$
-Direct cost set-aside		$a \cdot f \cdot .075$	$a \cdot f \cdot .075$	$a \cdot f \cdot .075$	$a \cdot f \cdot .85$
Revenue - Direct Costs					
Revenue Over Direct Costs Per Base Acre (+ by a)					

Corn Breakeven $+e+c=$ _____

Soybean Breakeven NFA $+j+i=$ _____

OFA $+(b \cdot h)+j+i=$ _____

§ Use your estimate on Line h. Actual deficiency payments will be the difference between \$2.75 target and the avg. U.S. corn price for 9/91 - 1/92

§§ The deficiency payment for 0/92 is assumed to be \$.58/bu. Check with ASCS for the official guaranteed payment level.

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Assumes \$50,000 limit is not reached
Maximum deficiency payment acres 77.5% of base

Your Input Data

a. ASCS base acres
b. ASCS base yield (bu./a.)
c. Yield-100% planted (bu./a.)
d. Yield 92.5% planted (bu./a.)
e. Direct costs of production (\$/a.)

100
108
110
120
163

f. Direct cost of set-aside (\$/a.)
g. Expected market price (\$/bu.)
h. Expected deficiency payment (\$/bu.)
i. Soybean yield (bu./a.)
j. Direct costs soybean production (\$/a.)
k. Expected soybean market price (\$/bu.)

10
2.30
.45
40
111
5.75

Calculations

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Value of production	a*c*g <u>25,300</u>	a*d*g*.925 <u>25,530</u>	Com a*d*g*.775 <u>21,370</u> Beans a*i*k*.15 <u>3,450</u>	Com a*d*g*.675 <u>18,630</u> Beans a*i*k*.25 <u>5,750</u>	a*i*k*.15 <u>3,450</u>
+Deficiency payment		a*b*h*.775 <u>3,767</u>	a*b*h*.775 <u>3,767</u>	a*b*h*.675 <u>3,281</u>	a*b*.58*.713 <u>4,466</u>
-Direct cost of production	a*e <u>16,300</u>	a*e*.925 <u>15,078</u>	Com a*e*.775 <u>12,633</u> Beans a*j*.15 <u>6,665</u>	Com a*e*.675 <u>11,003</u> Beans a*j*.25 <u>2,775</u>	Beans a*j*.15 <u>1,665</u>
-Direct cost set-aside		a*f*.075 <u>75</u>	a*f*.075 <u>75</u>	a*f*.075 <u>75</u>	a*f*.85 <u>850</u>
Revenue - Direct Costs	<u>9,000</u>	<u>14,144</u>	<u>14,234</u>	<u>13,808</u>	<u>5,401</u>
Revenue Over Direct Costs Per Base Acre (+ by a)	<u>90.00</u>	<u>141.44</u>	<u>142.34</u>	<u>138.08</u>	<u>54.01</u>
Corn Breakeven		+e+c= <u>2.77</u>			
Soybean Breakeven NFA			+j+i= <u>5.03</u>		
OFA				+(b*h)+j+i= <u>6.24</u>	

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